In the Claims

Claims 1-39 (cancelled).

Claim 40 (original): A method of forming at least one trenched isolation region, comprising:

providing a semiconductor substrate within a reaction chamber, the substrate having at least one trench extending therein;

providing a mixture within the chamber, the mixture comprising a precursor of an electrically insulative material within a supercritical fluid, the precursor being reactive at or above a threshold temperature to form the electrically insulative material, the mixture being initially provided within the reaction chamber at a temperature below the threshold temperature; and

raising the temperature of at least some of the mixture to a temperature of at least the threshold temperature to form the electrically insulative material within the at least one trench.

Claim 41 (currently amended): The method of claim 40 wherein the reaction of the precursor to form the electrically insulative material occurs entirely in the mixture; and wherein the electrically insulative material transfers from the mixture to within the at least one trench ~~the substrate to form the layer on the substrate~~.

Claim 42 (currently amended): The method of claim 40 wherein supercritical fluid defines a supercritical phase within the reaction chamber, and wherein the reaction of the precursor to form the electrically insulative material occurs at an interface of the supercritical phase and a surface of the substrate.

Claim 43 (currently amended): The method of claim 40 wherein the substrate has a surface composition, and wherein the precursor reacts with the surface composition at or above the threshold temperature to form the electrically insulative material within the at least one trench ~~as the layer on the substrate~~.

Claim 44 (original): The method of claim 40 wherein the temperature of the mixture is raised by heating the substrate and transferring heat from the substrate to the mixture.

Claim 45 (original): The method of claim 40 wherein the substrate is a semiconductor substrate.

Claim 46 (original): The method of claim 40 wherein the substrate comprises monocrystalline silicon.

Claim 47 (original): The method of claim 40 wherein the precursor comprises silicon and oxygen, and wherein the electrically insulative material is silicon dioxide.

Claim 48 (original): The method of claim 40 wherein the precursor is tetraethyl orthosilicate, and wherein the electrically insulative material is silicon dioxide.

Claim 49 (original): The method of claim 40 wherein the precursor is tris(tert-butoxy)silanol, and wherein the electrically insulative material is silicon dioxide.